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(54) Titre : SYSTEME DE NOM DE DOMAINE UTILISANT LES SCRIPTS DE LANGAGE TLDS ET SLDS  
(54) Title: DOMAIN NAME SYSTEM USING LANGUAGE SCRIPTS TLDS AND SLDS

(57) Abrégé/Abstract:

Chinese can be written in 2 different scripts that correspond to each other-traditional Chinese and simplified Chinese. As a result, users of Chinese Domain Names (CDN) have special needs that can be satisfied by creating a new type of TLD called "Language Script TLDs". This draft describes a system and its techniques that satisfy these special needs by using the <traditional> TLD and the <simplified> TLD and forming a relationship between them.

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## Domain Name System using Language Script TLDs or SLDs

(Although the following will use TLDs and Chinese to describe the invention, this invention applies to TLDs as well as SLDs and applies to the Chinese Language as well as all scripts in other languages.)

### Abstract

Chinese can be written in 2 different scripts that correspond to each other- traditional Chinese and simplified Chinese. As a result, users of Chinese Domain Names (CDN) have special needs that can be satisfied by creating a new type of TLD called "Language Script TLDs". This draft describes a system and its techniques that satisfy these special needs by using the <.traditional> TLD and the <.simplified> TLD and forming a relationship between them.

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## 1. Introduction

The <traditional> and <simplified> TLDs in Chinese characters are:

- a) <traditional> in traditional Chinese is ".ç'□é«" (U+7E41)( U+9AD4)
- b) <traditional> in simplified Chinese is ".ç'□ä½" (U+7E41)( U+4F53)
- c) <simplified> in simplified Chinese is ".ç@Ca½" (U+7B80)( U+4F53)
- d) <simplified> in traditional Chinese is ".ç°jé«" (U+7C21)( U+9AD4)

Using the 4 language script TLDs above, a Chinese Domain Name System can be created to satisfy the needs of CDN users by combining together the following 3 benefits:

Benefit A- A registrant is given the choice of pointing a traditional CDN to one location (ie. traditional Chinese website) and pointing the corresponding simplified CDN to another location (ie. simplified Chinese website).

Benefit B- The registration of a simplified CDN will automatically reserves the corresponding traditional CDN(s) and visa versa thus giving users the flexibility of using either script.

Benefit C- A method that will guide users to enter a CDN in their applications (ie. web browsers) matching the meaning that was intended by the registrant when the CDN was registered.

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## 2. Description of the Importance of the Benefits

### 2.1 Importance of Benefit A.

It would be appropriate for a traditional CDN to be pointing to a traditional website with contents that are suitable for visitors from Hong Kong or Taiwan. On the same line, it would be appropriate for a simplified CDN to be pointing to a traditional website with contents that are suitable for visitors from China or Singapore.

### 2.2 Importance of Benefit B.

Since most Chinese can read / write in both scripts, it is only appropriate for a traditional CDN to be mapped to its corresponding simplified CDN by applying a conversion. This will ensure that no matter what script the user types in, he will always be able to reach the intended location(s).

### 2.3 Importance of Benefit C.

The relationship between simplified Chinese and traditional Chinese is very complicated. A TC character that corresponds to a SC character may not have the same meaning. To complicate the situation, one TC character can be mapped into many different SC and visa versa. One CDN can potential have a great number of different written variations. Without a method, a user can be given a CDN and type in the correct CDN but still cannot reach the proper destination because it is a variation of the original CDN not intended by the registrant.

## 3. Solution / Method

The solution to delivering the 3 benefits explained above is a "Traditional / Simplified Chinese TLD Name System". This system uses a TLD of <traditional> for traditional CDNs (defined here as a CDN that uses all traditional characters) and a TLD of <simplified> for simplified CDNs (defined here as a CDN that uses all simplified characters). During registration, a person is allowed to register CDNs in either all traditional Chinese characters or all simplified Chinese characters but not by mixing the 2 scripts together. If he registers in traditional characters, he will be given a traditional CDN (with the TLD of <traditional>). At the same time, the corresponding simplified CDN(s) (with the TLD of <simplified>) is reserved- to be activated at a later date if the registrant chooses to do so. If he registers in simplified characters, he will be given a simplified CDN (with the TLD of <simplified>). At the same time, the corresponding traditional CDN(s) (with the TLD of <traditional>) is reserved.

If a user types in a traditional CDN (with the <traditional>), error checking can be done by the application (ie. web browser) on the CDN by searching for the characters in a Unicode table containing all the valid traditional Chinese characters. If a certain character is found not to be a valid traditional character, an error will be displayed to

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point out which character is invalid. If a user types in a simplified CDN (with the <.simplified>), the same error checking will be performed by searching for valid simplified Chinese character.

Under such a method of creating a relationship between the TLDs, all 3 benefits will be satisfied. Benefit A will be satisfied because he can point <whatever>.<traditional> to a traditional website and point <whatever>.<simplified> to a simplified website. Benefit B will be satisfied because when a user is given a <whatever>.<traditional> CDN, but because he is from mainland China and is more comfortable using the simplified script, he can simply use the corresponding CDN of <whatever>.<simplified>. In other words, a user can use the script of his choice whether it is traditional Chinese or simplified Chinese and still reach the location(s) intended by the registrant. Benefit C will be satisfied because when the user is given the <whatever>.<traditional> CDN, the <.traditional> tells him that he must set his Chinese Input editor to recognize TC only and thereby preserving the original intended meaning of the CDN when it was first registered. In other words, the language script TLDs give the users much more control and eliminates any guess work.

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